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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,712	07/10/2003	George T. Bayer	030364	2621

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EXAMINER

LAVILLA, MICHAEL E

ART UNIT PAPER NUMBER

1775

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/616,712	BAYER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael La Villa	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-13, and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 July 2006 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
3. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1-4, 7-13, and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. While applicant's claims are enabled for diffused coating thicknesses that applicant has exemplified, i.e., up to approximately 300 microns average thickness on carbon steel and stainless steel, applicant has explained that the prior art coatings have been unable to achieve large diffused coating thicknesses, particularly when the coating comprises desirable amounts of aluminum. See Table 1 and corresponding

discussion at pages 9 and 10 of applicant's Specification. As applicant has not otherwise explained how one of ordinary skill in the art would obtain diffused coating thicknesses in excess of approximately 300 microns and as applicant has also explained that achieving this goal has been elusive in the prior art, it is unclear how applicant's Specification provides guidance to one of ordinary skill in the art in making the claimed invention, where the claimed diffused coating thickness exceeds approximately 300 microns.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
6. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 1-4, 7-13, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
8. Regarding Claims 1, 3, 7, and 11, it is unclear whether the claimed thickness values are average values, maximum values, or some other quantity.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
10. A person shall be entitled to a patent unless –
11. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
12. Claims 1-4, 7-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bayer et al. WO 98/20182 for the reasons of record in the Office Action mailed on 28 April 2006.

13. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Yagi et al. USPN 4,079,157. Yagi et al. teaches a steel substrate that is diffusion coated with a coating of aluminum and silicon that is greater than 250 microns in thickness. See Yagi et al. (Figures 2, 3, and 6; col. 5, lines 11-15; col. 5, line 65 through col. 6, line 66; and col. 8, lines 13-58).

***Response to Amendment***

14. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Kukharev of the Office Action mailed on 28 April 2006. Rejections are withdrawn. It is remarked that rejection over Claim 3 is withdrawn because there is no prima facie evidence that the diffused coating of Kukharev contains 15 weight percent aluminum or more.

15. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Bayer of the Office Action mailed on 28 April 2006. Applicant argues that the claimed invention is supported by applicant's parent application, rendering Bayer unavailable prior art under 35 USC 102(b). Applicant points to Examples 1 and 2 in addition to other portions of the Specification of Serial No. 08/745,199, applicant's parent application. In the present application, independent claims 1, 3, 7, and 11 and all claims dependent thereon refer to a wide range of workpiece materials and diffused coating thicknesses. In the parent application, Example 1 describes carbon steel and stainless steel workpieces with an average 300 micron thick diffused coating, whereas Example 2 describes a copper workpiece with an average 150 micron

thick and maximum 200 micron thick diffused coating. The claimed inventions, however, refer to these and other workpiece materials and to a wide range of diffused coating thicknesses, including thicknesses greater than those exemplified. It is unclear what is the basis for concluding that applicant was in possession of the entire breadth of the claimed inventions, as of the filing date of the parent application. Applicant has not provided a specific argument to support the breadth of the claimed inventions, and no discussion of ranges of diffusion coating thicknesses is otherwise provided in the Specification of the parent application. At pages 9 and 10 of the Specification of this application, including Table 1 therein, material relating to the difficulties of obtaining diffused coating thicknesses over the breadth of the claimed diffusion coating thickness range, particularly with respect to diffused coatings having high levels of aluminum, has been added to what had been filed in the parent application. Significantly, this added material is characterized as overcoming difficulties in the prior art. It is absent in the parent application and cannot therefore be a basis for antecedent written description support. Moreover, this added material suggests that the parent application does not provide enablement support. The claims in view of this added material have been rejected as non-enabled in this application, and it follows that they were not enabled by the parent application. See MPEP 201.11 (explaining that, for a parent application to confer an earlier effective filing date, the parent application should comport with section 112 for the claimed invention).

Therefore, applicant's arguments are not persuasive, and so the rejection is maintained.

***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1775

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa  
16 August 2006

  
MICHAEL E. LAVILLA PH.D.  
PRIMARY EXAMINER